

## INDIANA DEPARTMENT OF TRANSPORTATION

### STANDARDS COMMITTEE MEETING AGENDA

### Driving Indiana's Economic Growth

August 16, 2007

#### MEMORANDUM

TO: Standards Committee

FROM: Mike Milligan, Secretary

RE: Minutes for the August 16, 2007 Standards Committee Meeting

The Standards Committee meeting was called to order by the Chairman at 9:02 a.m. on August 16, 2007 in the N755 Bay Window Conference Room. The meeting was adjourned at 11:35 a.m.

The following members were in attendance:

Mark Miller, Chairman Dennis Kuchler, State Constr. Engr. Bob Cales, Contract Admin. Ron Heustis, Constr. Mgmt. Mike Hoy, Crawfordsville Dist.\*\*

Dave Andrewski, Pvmt. Engineering John Wright, Roadway Services Larry Rust, Traffic Control Anne Rearick, Structural Services Michael Prather, Materials Mgmt.\* Jim Keefer, Fort Wayne Dist.

- \* Proxy for Ron Walker
- \*\* Proxy for Shakeel Baig

Also in attendance were the following:

Mike Milligan, Secretary Tony Uremovich, INDOT Fred Hohl, INDOT Deb Hood, INDOT

Ed Ratulowski, FHWA Paul Berebitsky, ICA John Singleton, 3M

### Old Business

Item No.	Sponsor	<u>Page</u>
Item 18-13 Standard Drawings Action:	Mr. Wright 614-RRGC-01 through 05 Withdrawn	3
Item 18-14 614 Action:	Mr. Wright <del>CONCRETE</del> HEADERS Withdrawn	4

# New Business

Item 08-3-1 921.02(b) 921.02(b)1 Action:	Mr. Rust Preformed Plastic Material Requirements Withdrawn	7
Item 08-3-2 918.03 Action:	Mr. Heustis Geotextile for Use With Underdrains Passed as submitted	9

cc: Committee Members (11)
 FHWA (4)
 ICA Representative (1)

Item No. 18-13 Mr. Wright

Date: 8/16/07

#### PROPOSED NEW STANDARD DRAWINGS

```
614-RRGC-01, Railroad Crossing Details, HMA Header
614-RRGC-02, Railroad Crossing Details, RC Header
614-RRGC-03, Railroad Crossing Details, HMA Inter-Track Header
614-RRGC-04, Railroad Crossing Details, RC Inter-Track Header
614-RRGC-05, Railroad Crossing Details, Crown-Out Diagram
```

Other sections containing
specific cross references:

None

None

Recurring Special Provisions
potentially affected:

None

General Instructions to Field Employees

Update Required? Y\_\_\_ N\_\_
By - Addition or Revision

Frequency Manual
Update Required? Y\_\_\_ N\_\_
By - Addition or Revision

Standard Sheets potentially affected:
See Above

Motion: M Action: Withdrawn Second: M

Ayes: Nays:

Mr. Wright Date: 08/16/07

#### REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 614, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

### **SECTION 614 – CONCRETE HEADERS**

## 614.01 Description

This work shall consist of the construction or reconstruction of <del>PCC</del> headers adjacent to railroad tracks<del>, bridges, and similar locations</del> in accordance with 105.03.

#### **MATERIALS**

### 614.02 Materials

Materials shall be in accordance with the following:

Concrete, Class C	702
Curing Materials	912.01
Dense Graded Subbase	
HMA	402.02
Reinforcing Steel, <i>Epoxy Coated</i>	910.01( <i>b</i> )9

If the header is adjacent to cement concrete base or pavement, the header concrete shall be the same composition as that of the base or pavement header constructed monolithic with the base or pavement. If the adjacent base or pavement is thickened, that portion forming the thickening shall be considered as part of the header.

If the header is adjacent to asphalt pavement, the concrete shall be class A in accordance with 702 using class AP coarse aggregate.

## **CONSTRUCTION REQUIREMENTS**

## **614.03** *General*

Construction of headers shall not begin until after the railroad has completed its work. The railroad's work shall not be damaged. The elevation of the headers shall match the elevation of the portion constructed by the railroad. Terminal joints shall be constructed in accordance with 503.

### 614.03 614.04 PCC Headers

Construction shall be in accordance with the applicable provisions of 702 requirements of 302, 609, and with these requirements.

Welding shall be in accordance with 711.32.

Headers at railroad crossings shall be as shown on the plans.

### 614.05 Method of Measurement HMA Headers

Construction of HMA headers shall be in accordance with 402.

## 614.06 Reconstructed Cement Concrete Header

This work shall be in accordance with the plans. Round plug welds or rectangular shaped plug welds may be used to weld the steel angle to the existing steel edge protection. Round plug welds shall be a minimum of 1 in. (25 mm) diameter.

Welding shall be in accordance with 711.32.

## **614.05** *614.06* Method of Measurement

Cement Portland cement concrete header and reconstructed cement concrete header will be measured by the linear foot (meter) square yard (square meter). HMA surface, intermediate, and base will be measured by the ton (megagram) in accordance with 402.19. Dense graded subbase will be measured by the cubic yard (cubic meter) in accordance with 302.08. Terminal joints will be measured by the linear foot (meter) in accordance with 503.07.

## 614.06 614.07 Basis of Payment

The accepted quantities of this work Portland cement concrete headers will be paid for at the contract unit price per linear foot (meter) square yard (square meter) for header, cement concrete, of the type specified, or header, cement concrete, reconstruct, PCC complete in place. HMA surface, intermediate, and base will be paid for in accordance with 402.20. Dense graded subbase will be paid for in accordance with 302.09. Terminal joints will be paid for in accordance with 503.08.

Payment will be made under:

Pay Item	Pay Unit Symbol
Header, Cement Concrete PCC,	LFT (m) SYS (m2)
<del>type</del>	
Header, Cement Concrete, Reconstruct	LFT (m)

The cost of *reinforcing steel*, edge protection, metal chairs, excavation, and necessary incidentals shall be included in the cost of the pay items header, cement concrete or in the cost of the HMA surface, intermediate, and base.

Item No. 18-14 (cont.)

Mr. Wright Date: 08/16/07

## REVISION TO 2006 STANDARD SPECIFICATIONS

SECTION 614, CONTINUED.

Other sections containing specific cross references:

pecific cross fere.

None

General Instructions to Field Employees

Update Required? Y\_\_\_ N\_\_\_ By - Addition or Revision

Frequency Manual

Update Required? Y\_\_\_ N\_\_\_ By - Addition or Revision

Recurring Special Provisions

potentially affected:

Standard Sheets potentially affected:

See Item 18-13

None

Motion: M Second: M

Ayes: Nays: Action: Withdrawn

REVISION TO 2008 STANDARD SPECIFICATIONS

SECTION 921, BEGIN LINE 13, DELETE AND INSERT AS FOLLOWS:

### (b) Preformed Plastic

This material shall consist of a homogeneous preformed plastic film. with a minimum thickness of 60 mils (1.5 mm) and a There shall be two types of preformed plastic material:

- 1. Type A material shall have a smooth plane surface, with a minimum thickness of 60 mils (1.5 mm) throughout the entire cross section.
- 2. Type B material shall have an embossed patterned surface that shall have approximately 35% to 65% of the surface area raised. The edges of the raised areas shall present a near vertical face to traffic from any direction. The minimum thickness of the raised area shall be 60 mils (1.5 mm) measured at the thickest section of the cross section. The area between the raised areas shall be a minimum of 20 mils (0.5 mm) measured at the thinnest section of the cross section. The minimum height of the raised areas above the non-raised areas of the material shall be 40 mils (1.0 mm).

The width shall be as specified. The back of the preformed plastic material shall have a precoated adhesive and an easily removable backing covering which shall protect the adhesive in storage and facilitate rapid application. The adhesive shall allow the preformed plastic material to be repositioned on the pavement surface to which it is applied before permanently fixing it in its final position with downward pressure.

The plastic material shall be capable of being affixed to either HMA or PCCP by means of the precoated adhesive. and, following Following the initial application of pressure, the plastic material shall mold itself to pavement contours, breaks, and faults by traffic action at normal pavement temperatures.

The color of the white plastic film shall be determined by a standard color difference meter, such as the Gardner Color Difference Meter manufactured by Gardner Laboratories, Inc. Bethesda, Maryland. The plastic film shall not show deviations from a magnesium oxide standard greater than the following.

SCALES	DEFINITION	MAGNESIUM OXIDE	SAMPLE
Rd	Reflectance	100	70 Minimum
a	Redness-Greenness	0	-5 to +5
b	Yellowness-Blueness	0	-10 to +10

The color of the yellow plastic film shall visually match color No. 33538 of Federal Standard 595a. The pigment shall include medium chrome yellow.

Item No. 08-3-1 (contd.)

Mr. Rust Date: 8/16/07

REVISION TO 2008 STANDARD SPECIFICATIONS

SECTION 921, CONTINUED.

## 1. Material Requirements

The material shall be composed of plasticizers, pigments, and glass *or ceramic* beads. The pigment shall contain 20% minimum titanium dioxide for white plastic material. During manufacture, glass beads shall be mixed into the compound at a minimum of 15% and a maximum of 20% by weight. A layer of glass beads shall be bonded to the top surface of type A material. Ceramic beads or glass beads shall be bonded to the top surface of type B material. The near vertical faces of type B material shall be coated with a layer of glass beads.

Other sections containing specific cross references:

808.02 Pg 674

General Instructions to Field Employees

Standard Sheets potentially affected:

Update Required? Y\_\_\_ N\_\_\_ By - Addition or Revision

Frequency Manual

Update Required? Y\_\_\_ N\_\_\_ By - Addition or Revision

Recurring Special Provisions potentially affected:

None

None

Motion: M Second: M

Ayes: Nays: Action: Withdrawn

Item No. 08-3-2
Mr. Heustis
Date: 8/16/07

REVISION TO 2008 STANDARD SPECIFICATIONS

SECTION 918, BEGIN LINE 54, DELETE AS FOLLOWS:

Requests for adding geotextiles to the approved list shall be supported by a certification documenting compliance with the above requirements and a sample. The certification shall be prepared by the manufacturer in accordance with the applicable requirements of 916. No relabeled materials will be considered for approval. A specified material on the approved list will not be listed under more than one name. When it is determined the material is acceptable, it will be added to the list of approved Geotextiles for Use with Underdrains and it may be used upon publication of the list.

A manufacturer, requesting that a geotextile be added to the approved list, shall provide a certification documenting compliance with the above requirements and a sample to the Materials and Tests Division. The certification shall be prepared by the manufacturer in accordance with 916. No relabeled materials will be considered for approval. A specified material on the approved list will not be listed under more than one name. When it is determined the material is acceptable, it will be added to the list of approved Geotextiles for Use with Underdrains and it may be used upon publication of the list.

other sections containing specific cross references:	Update Required? No
702.03 Pg 444 718.02 Pg 567	Frequency Manual Update Required? No
Recurring Special Provisions potentially affected:  None	Standard Sheets potentially affected: None
Motion: Mr. Heustis Second: Mr. Kuchler Ayes: 10 Nays: 0	Action: Passed as submitted  RSP Effective: Lettingx_ 2009 Standard Specifications Book 2009 Standards Edition 2008 Design Manual Technical Advisory
	Received FHWA Approval? Yes